A NEW SPECIES OF PROBOLOMYRMEX, AND THE FIRST DESCRIPTION OF A PROBOLOMYRMEX MALE (HYMENOPTERA, FORMICIDÆ)

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Among the Micronesian ants sent me for determination by the Pacific Science Board, through J. L. Gressitt, Honolulu, Hawaii, there is a single male (unassociated with workers or females) of a *Probolomyrmex* which I am describing below as a new species. However, I realize that the male may eventually prove to be that of a previously described species. The male of *Probolomyrmex* can be readily distinguished from those of other genera by the placement of the antenna at the extreme anterior border of the clypeus, by its unusually small size and slender body and by the characteristically shaped petiole. Even though Mayr described the monobasic genus (genotype, *filiformis*) over half a century ago from worker individuals collected at Port Elizabeth, Cape Colony, Africa, no one has seen or described the male of *Probolomyrmex*. In 1949 (Proc. Ent. Soc. Wash. 51: 38–40) I listed the then five known species including one that I was describing from Barro Colorado Island, Panama. In that paper I gave the original references, castes, and type localities for the five species. Shortly afterward, Weber described a sixth species, *parvus* from Busnia, Uganda, Africa (1949, Amer. Mus. Novitates No. 1398: 3, 9). The present new species represents the seventh. Brown (1952, Harvard Univ., Mus. Comp. Zool. Breviora No. 6, p. 6) reports that he has seen an apparently undescribed species from the Canberra Region of eastern Australia. In the same paper he also suggests that the genus *Probolomyrmex* be removed from the tribe Proceratiini and be placed in the tribe Platythyreini and gives his reasons for the change. After studying the male described here I am unable either to confirm or to disprove Brown's new tribal placement of the genus. I would certainly agree with him that this group

of ants is most highly specialized, as is evidenced by the shape of the body, lack of eyes (in the worker), position of the antennæ, type of wing venation (male) and possibly other characters. Although species are now recorded from such distant parts of the World as Africa, Java, Micronesian Islands, Australia, Panama and South America, paradoxically we know almost nothing of these ants except that their colonies are extremely small and the individuals of a cryptobiotic nature.

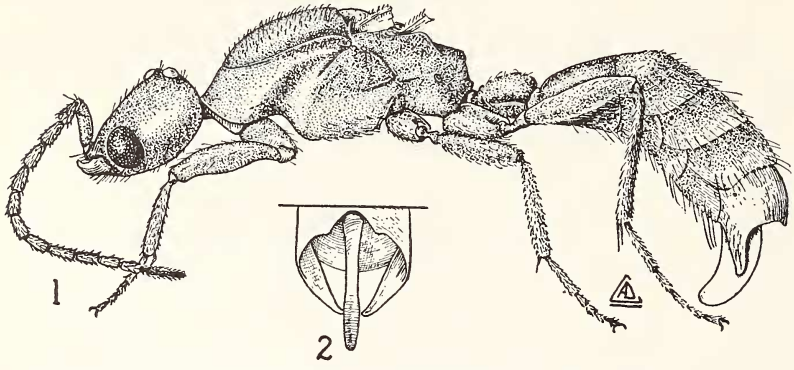

FIG. 1. Profile view of male of **Probolomyrmex palauensis** n. sp.; fig. 2, posterior view of genital appendages. Wings not shown. (Illustrations by Arthur D. Cushman.)

Probolomyrmex palauensis n. s.

MALE: Length 1.8 mm.

Unusually small and slender. Head oblong; measured at its greatest breadth and length (including the eyes but not the mandibles) 1.2 times as long as broad, with subtruncate front, rounded posterior corners and posterior border and weakly convex sides. Ocelli of about normal size, not strongly protruding above the general surface of the head, 0.15 mm. in front at their greatest width. Eye on the anterior half of the head, exceedingly close to the base of the mandible, not unusually large or convex, approximately 0.10 mm. in its greatest diameter. Antenna inserted at the extreme anterior border of the clypeus; 13-segmented; scape curved, broader than the basal funicular segments, (excluding the pedicel) not quite as long as the combined lengths of the first two funicular segments; funiculus filiform, the last segment as long as, or longer than, the combined lengths of the two preceding segments. Median region of the clypeus subtriangular, very small, with the apex extending some distance posteriorly between the insertions of the antennæ. No visible frontal area or frontal carinæ. Head, in profile, higher in the posterior than the anterior half.

Mandible vestigial, very short, stubby, edentate. Pronotum sloping anteroventrally, not concealed by the mesonotum. Mesonotum, from above, 0.4 mm. in length, narrowest anteriorly, where it is subtruncate. Mayrian furrows and parapsidal sutures lacking. Legs moderately long, without noticeably enlarged femora and tibiæ; each anterior and middle tibia with a single spur, the posterior tibia with two spurs. Tarsal claws simple. Anterior wing without any apparent stigma or veins, especially in the apical half of the wing. Petiole with a very short, scarcely noticeable peduncle; the node, from above, longer than broad, compressed, narrowest anteriorly, subtruncate posteriorly. Gaster, from above, slender and elongate, much narrowed and constricted at its junction with the petiole; apex of gaster with unusually large genitalia; viewed from behind and somewhat above, the dorsal surface of the sagitta appearing as a long, flattened, strap-like process (almost equally broad throughout) which is curved posteroventrally near the apex. Volsellæ almost entirely hidden from view, at least not visible enough for adequate description. Basal portion of stipes curved, the convexity of the curve being external (that is, lateral to the axis of the body), the apical portion of the stipes tapering rapidly to a rather acute point which is directed mediоposteriorly toward the sagittæ Penicilli apparently lacking.

Body, in some lights, rather shining although bearing a rather dense vestiture of suberect to erect grayish hairs, those on the gaster being the longest. Antennæ and legs densely clothed with rather short, suberect hairs.

Body brownish; mandibles, antennæ and legs lighter.

Type locality—A wooded peak, SW. of Ulimang, Babelthuap I., Palau Islands; Dec. 12, 1947, H. S. Dybas, Pacific Sci. Board, Ent. Survey of Micronesia.

Described from a single holotype, a winged male, which has been placed in the United States National Museum under U. S. N. M. No. 62,200.